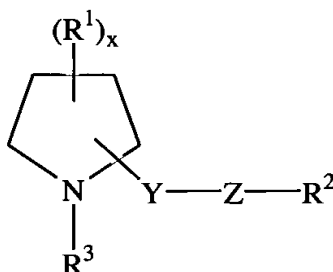


In accordance with 37 C.F.R. § 1.121, please substitute for claim 1 the following rewritten version of the same claim, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made".

1. (2X Amended) A compound of the formula



wherein

x is from 0 to 2;

R<sup>1</sup> is selected from the group consisting of hydroxy, C<sub>1</sub> to C<sub>9</sub> alkoxy (optionally substituted by halo), C<sub>1</sub> to C<sub>9</sub> cycloalkylalkoxy (wherein the cycloalkyl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl or halo, and the alkoxy group is optionally substituted by halo), arylalkoxy (wherein the aryl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy or halo, and the alkoxy group is optionally substituted by halo) and C<sub>1</sub> to C<sub>9</sub> alkyl amino (wherein the alkyl group is optionally substituted by halo)

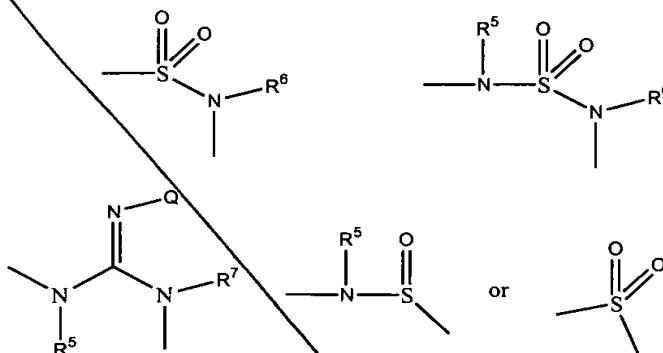
R<sup>2</sup> is selected from the group consisting of H, alkyl, aryl, arylalkyl, cycloalkyl and cycloalkylalkyl, wherein alkyl moieties are optionally substituted by halo, and aryl groups are optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>4</sub> alkoxy and halo,

R<sup>3</sup> is absent when -Y-Z-R<sup>2</sup> is attached to N, or R<sup>3</sup> is selected from the group consisting of H, C<sub>1</sub> to C<sub>7</sub> alkyl and benzyl, when

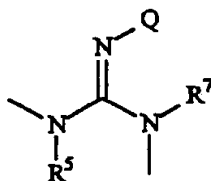
-Y-Z-R<sup>2</sup> is not attached to N;

Y is C<sub>2</sub> to C<sub>10</sub> alkylene, in which one non-terminal carbon atom may be replaced by O; and

Z is



wherein  $R^5$ ,  $R^6$  and  $R^7$  are independently H, aryl ( $C_1$  to  $C_3$ ) alkyl or cycloalkyl ( $C_1$  to  $C_3$ ) alkyl optionally substituted by halo, and Q is H or methyl, or Q is linked to  $R^5$  or  $R^7$  to form a five-membered ring or Q is linked to  $R^2$  to form a six-membered ring, provided that when Z is



at least one of  $R^5$  and  $R^7$  is aryl( $C_1$  to  $C_3$ )alkyl or cycloalkyl( $C_1$  to  $C_3$ )alkyl, optionally substituted by halo;  
or a pharmaceutically acceptable salt thereof.

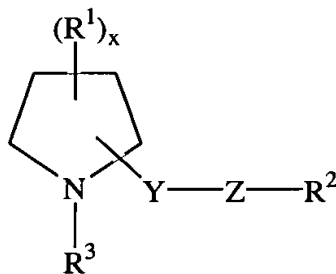
3. (Amended) The compound of claim 1 or 30 wherein  $R^2$  is selected from phenyl, halophenyl, benzyl, halobenzyl, phenylethyl, halophenylethyl, phenylpropyl, halophenylpropyl, phenylbutyl, halophenylbutyl, tolyl, methoxybenzyl, trifluoromethylbenzyl, halo-methoxybenzyl, phenylbenzyl, adamantanemethyl, adamantaneethyl, adamantanepropyl, cyclohexanemethyl, cyclohexaneethyl, and naphthyl.

4. (2X Amended) The compound of claim 1 or 30 wherein x is 0.

C3  
5. (2X Amended) The compound of claim 1 or 30 wherein x is 1 or 2, and R<sup>1</sup> is selected from hydroxy, C<sub>1</sub> to C<sub>9</sub> alkoxy (optionally substituted by halo), C<sub>1</sub> to C<sub>9</sub> cycloalkylalkoxy (wherein the cycloalkyl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl or halo, and the alkoxy group is optionally substituted by halo), arylalkoxy (wherein the aryl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy or halo, and the alkoxy group is optionally substituted by halo) and C<sub>1</sub> to C<sub>9</sub> alkylamino wherein the alkyl group is optionally substituted by halo.

Please add the following new claims:

--30. (NEW) A compound of the formula



wherein

x is from 0 to 2;

R<sup>1</sup> is selected from the group consisting of hydroxy, C<sub>1</sub> to C<sub>9</sub> alkoxy (optionally substituted by halo), C<sub>1</sub> to C<sub>9</sub> cycloalkylalkoxy (wherein the cycloalkyl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl or halo, and the alkoxy group is optionally substituted by halo), arylalkoxy (wherein the aryl group is optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy or halo, and the alkoxy group is optionally substituted by halo) and C<sub>1</sub> to C<sub>9</sub> alkyl amino (wherein the alkyl group is optionally substituted by halo)

R<sup>2</sup> is selected from the group consisting of H, alkyl, aryl, arylalkyl, cycloalkyl and cycloalkylalkyl, wherein alkyl moieties are optionally substituted by halo, and aryl

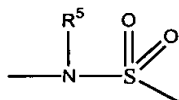
groups are optionally substituted by C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>4</sub> alkoxy and halo,

R<sup>3</sup> is absent when -Y-Z-R<sup>2</sup> is attached to N, or R<sup>3</sup> is selected from the group consisting of H, C<sub>1</sub> to C<sub>7</sub> alkyl and benzyl, when

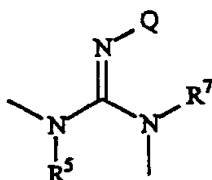
-Y-Z-R<sup>2</sup> is not attached to N;

Y is pentylene, hexylene, heptylene, octylene or nonylene; and

Z is



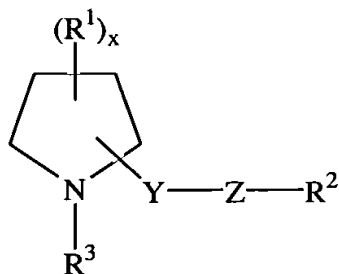
C4 wherein R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are independently H, aryl (C<sub>1</sub> to C<sub>3</sub>) alkyl or cycloalkyl (C<sub>1</sub> to C<sub>3</sub>) alkyl optionally substituted by halo, and Q is H or methyl, or Q is linked to R<sup>5</sup> or R<sup>7</sup> to form a five-membered ring or Q is linked to R<sup>2</sup> to form a six-membered ring, provided that when Z is



at least one of R<sup>5</sup> and R<sup>7</sup> is aryl(C<sub>1</sub> to C<sub>3</sub>)alkyl or cycloalkyl(C<sub>1</sub> to C<sub>3</sub>)alkyl, optionally substituted by halo;

or a pharmaceutically acceptable salt thereof.

31. (NEW) A method of treating a patient in need of a sedative, a sleep regulator, an anticonvulsant, a regulator of hypothalamo-hypophyseal secretion, an antidepressant, a modulator of cerebral circulation, treatment of asthma or treatment of irritable bowel syndrome comprising administering to said patient a therapeutically effective amount of H<sub>3</sub> receptor ligand or a pharmaceutically acceptable salt thereof, said H<sub>3</sub> receptor ligand being a compound of the formula



wherein

x is from 0 to 2;

C4  
R¹ is selected from the group consisting of hydroxy, C₁ to C₉ alkoxy (optionally substituted by halo), C₁ to C₉ cycloalkylalkoxy (wherein the cycloalkyl group is optionally substituted by C₁ to C₄ alkyl or halo, and the alkoxy group is optionally substituted by halo), arylalkoxy (wherein the aryl group is optionally substituted by C₁ to C₄ alkyl, C₁ to C₃ alkoxy or halo, and the alkoxy group is optionally substituted by halo) and C₁ to C₉ alkyl amino (wherein the alkyl group is optionally substituted by halo)

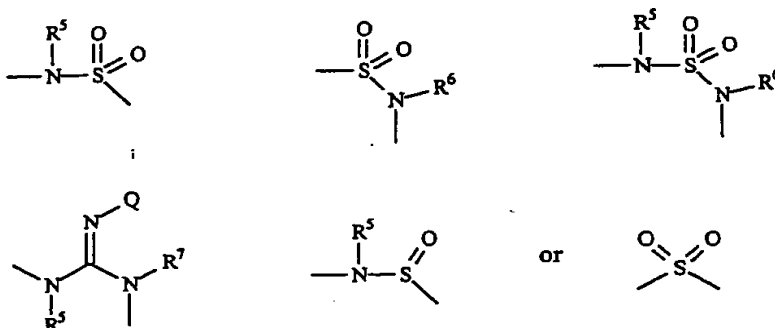
R² is selected from the group consisting of H, alkyl, aryl, arylalkyl, cycloalkyl and cycloalkylalkyl, wherein alkyl moieties are optionally substituted by halo, and aryl groups are optionally substituted by C₁ to C₄ alkyl, C₁ to C₄ alkoxy and halo,

R³ is absent when -Y-Z-R² is attached to N, or R³ is selected from the group consisting of H, C₁ to C₇ alkyl and benzyl, when

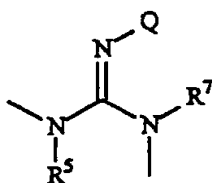
-Y-Z-R² is not attached to N;

Y is C₂ to C₁₀ alkylene, in which one non-terminal carbon atom may be replaced by O; and

Z is



C4 wherein  $R^5$ ,  $R^6$  and  $R^7$  are independently H, aryl ( $C_1$  to  $C_3$ ) alkyl or cycloalkyl ( $C_1$  to  $C_3$ ) alkyl optionally substituted by halo, and Q is H or methyl, or Q is linked to  $R^5$  or  $R^7$  to form a five-membered ring or Q is linked to  $R^2$  to form a six-membered ring, provided that when Z is



at least one of  $R^5$  and  $R^7$  is aryl( $C_1$  to  $C_3$ )alkyl or cycloalkyl( $C_1$  to  $C_3$ )alkyl, optionally substituted by halo;  
or a pharmaceutically acceptable salt thereof.

32. (NEW) The method of claim 31, wherein  $R^2$  is selected from phenyl, halophenyl, benzyl, halobenzyl, phenylethyl, halophenylethyl, phenylpropyl, halophenylpropyl, phenylbutyl, halophenylbutyl, tolyl, methoxybenzyl, trifluoromethylbenzyl, halo-methoxybenzyl, phenylbenzyl, adamantanemethyl, adamantaneethyl, adamantanepropyl, cyclohexanemethyl, cyclohexaneethyl, and naphthyl.

33. (NEW) The method of claim 31, wherein x is 0.